

VEGETATION DESCRIPTIONS FOR CONGAREE SWAMP NATIONAL MONUMENT

Fagus grandifolia - Quercus nigra Forest

COMMON NAME American Beech - Water Oak Forest

SYNONYM

PHYSIOGNOMIC CLASS Forest (I.)

PHYSIOGNOMIC SUBCLASS Deciduous forest (I.B.)

PHYSIOGNOMIC GROUP Cold-deciduous forest (I.B.2.)

PHYSIOGNOMIC SUBGROUP Natural/Semi-natural (I.B.2.N.)

FORMATION Lowland or submontane cold-deciduous forest (I.B.2.N.a.)

ALLIANCE *Fagus grandifolia* - *Quercus alba* Forest Alliance

CLASSIFICATION CONFIDENCE LEVEL 1

USFWS WETLAND SYSTEM Upland

RANGE

Globally

Fagus grandifolia - *Quercus nigra* Forest is known currently from the Coastal Plain of North Carolina, South Carolina, and possibly Virginia.

Congaree Swamp National Monument

This forest type occurs in the uplands of the northwestern portion of the park.

ENVIRONMENTAL DESCRIPTION

Globally

These forests occur on mesic slopes and upland flats.

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Fagus grandifolia - *Quercus nigra* Forest occurs on middle to lower convex slopes.

MOST ABUNDANT SPECIES

Globally

Stratum

Species

Tree canopy

Fagus grandifolia, *Quercus nigra*

Tree subcanopy

Ostrya virginiana, *Carpinus caroliniana*, *Cornus florida*

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Stratum

Species

Tree canopy

Fagus grandifolia, *Quercus nigra*, *Liquidambar styraciflua*, *Quercus michauxii*,
Quercus alba

Tree subcanopy

Ilex opaca

Short shrub

Rhododendron canescens

USGS-NPS Vegetation Mapping Program
Congaree Swamp National Monument

DIAGNOSTIC SPECIES

Globally

Quercus nigra, *Fagus grandifolia*, *Symplocos tinctoria*, *Callicarpa americana*

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Fagus grandifolia, *Quercus nigra*, *Ilex opaca*, *Rhododendron canescens*, *Chasmanthium laxum* var. *sessiliflorum*

VEGETATION DESCRIPTION

Globally

Mesic mixed hardwood forests dominated by *Fagus grandifolia* and *Quercus nigra* with limited *Quercus alba*. *Vaccinium* sp. and *Arundinaria gigantea* are important in the shrub layer. One example has a canopy dominated by *Fagus grandifolia*, *Liriodendron tulipifera*, and *Quercus nigra*. The understory is diverse and contains *Ostrya virginiana*, *Carpinus caroliniana*, and *Cornus florida*. *Symplocos tinctoria* and *Callicarpa americana* are common shrubs.

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These closed canopy forests are dominated by *Fagus grandifolia*, *Liquidambar styraciflua*, *Quercus alba*, and *Quercus nigra* with a well-developed subcanopy of *Ilex opaca*. Other canopy species that may be present include *Nyssa sylvatica*, *Quercus laurifolia*, *Quercus michauxii*, *Quercus pagoda*, *Ulmus alata*, *Acer rubrum*, and *Liriodendron tulipifera*. *Pinus taeda* may also be present particularly in occurrences with a history of disturbance. Other species in the understory include *Carpinus caroliniana* and *Cornus florida*. The well-developed shrub layer contains a variety of species including *Euonymus americana*, *Rhododendron canescens*, *Vaccinium elliotii*, *Vaccinium pallidum*, *Gaylussacia dumosa*, *Gaylussacia frondosa*, *Symplocos tinctoria*, *Arundinaria gigantea*, *Asimina triloba*, *Callicarpa americana*, and others. The herbaceous layer ranges from sparse to moderately well-developed, and among the species that occur are *Osmunda cinnamomea*, *Polystichum acrostichoides*, *Mitchella repens*, *Chasmanthium laxum* var. *sessiliflorum*, *Malaxis unifolia*, *Arisaema triphyllum*, *Athyrium filix-femina* ssp. *asplenioides*, *Panicum boscii*, *Goodyera pubescens*, *Carex debilis*, *Carex abscondita*, and *Tipularia discolor*. The vine/liana stratum is sparse and can contain *Parthenocissus quinquefolia*, *Smilax bona-nox*, *Toxicodendron radicans*, *Bignonia capreolata*, and *Smilax hispida*, among others.

OTHER NOTEWORTHY SPECIES

The exotic species *Lonicera japonica* is present within the park in these forests.

CONSERVATION RANK G3

RANK JUSTIFICATION

DATABASE CODE CEGL007211

COMMENTS

REFERENCES